

## Recombinant SARS-COV-2 Spike RBD (N501Y, K417N,E484K)(His Tag)

### 产品信息

产品名称	产品编号	规格
Recombinant SARS-COV-2 Spike RBD (N501Y, K417N,E484K)(His Tag)	94028ES25	25 µg
	94028ES60	100 µg
	94028ES76	500 µg
	94028ES80	1 mg

### 产品描述

SARS-CoV-2, which causes the global pandemic coronavirus disease 2019 (Covid-19), belongs to a family of viruses known as coronaviruses that also include MERS-CoV and SARS-CoV-1. Coronaviruses are commonly comprised of four structural proteins: Spike protein (S), Envelope protein (E), Membrane protein (M) and Nucleocapsid protein (N). The SARS-CoV-2 S protein is a glycoprotein that mediates membrane fusion and viral entry. The S protein is homotrimeric, with each ~180-kDa monomer consisting of two subunits, S1 and S2. The RBD of SARS-CoV-2 binds a metalloproteinase, angiotensin-converting enzyme 2 (ACE-2). Before binding to the ACE-2 receptor, structural analysis of the S1 trimer shows that only one of the three RBD domains is in the "up" conformation. This is an unstable and transient state that passes between trimeric subunits but is nevertheless an exposed state to be targeted for neutralizing antibody therapy. Polyclonal antibodies to the RBD of the SARS-CoV-2 protein have been shown to inhibit interaction with the ACE-2 receptor, confirming RBD as an attractive target for vaccinations or antiviral therapy.

### 产品性质

别名	S protein RBD; S glycoprotein RBD; Spike protein RBD
Accession	QHD43416.1
表达区间及表达系统	Recombinant SARS-COV-2 Spike RBD (N501Y,K417N,E484K) Protein is expressed from HEK293 Cells with His tag at the C-terminal. It contains Arg319 - Phe541 ( N501Y, K417N, E484K).
分子量	Approximately 26.2 kDa. Due to glycosylation, the protein migrates to 30-40 kDa based on Tris-Bis PAGE result.
纯度	> 95% as determined by SDS-PAGE and HPLC.
活性	<b>ELISA Data:</b> Immobilized SARS-COV-2 Spike RBD (N501Y, K417N, E484K) , His Tag at 0.5µg/ml (100ul/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 23.3ng/ml determined by ELISA.
内毒素	< 1.0 EU per 1µg of the protein by the LAL method.
制剂	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
复溶	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/mL is recommended (usually we use 1 mg/mL solution for lyophilization). Dissolve the lyophilized protein in distilled water.

## 运输与保存方法

冰袋运输。-20°C至-80°C保存，一年有效期。

复溶后，-20 至 -80°C，在未开封状态下保存 3-6 个月。复溶后，2-8°C 保存 2-7 天。

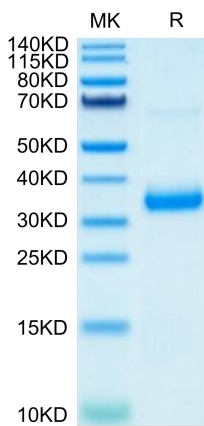
建议第一次使用时分装冻存，避免反复冻融。

## 注意事项

1. 避免反复冻融。
2. 为了您的安全和健康，请穿实验服并戴一次性手套操作。
3. 本产品仅作科研用途！

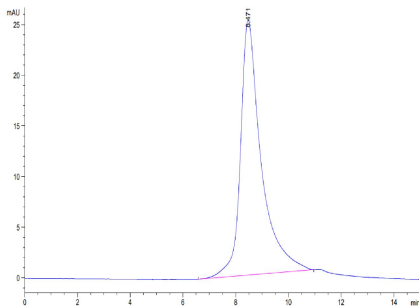
## 产品数据

### Tris-Bis PAGE



SARS-COV-2 Spike RBD (N501Y,K417N,E484K) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

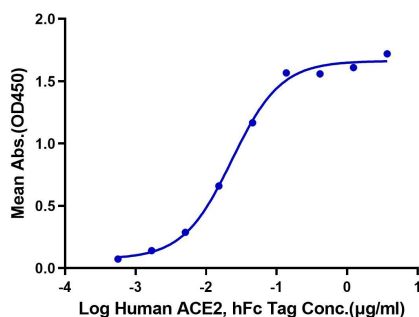
### SEC-HPLC



The purity of SARS-COV-2 Spike RBD (N501Y,K417N,E484K) is greater than 95% as determined by SEC-HPLC.

### ELISA Data

**SARS-COV-2 Spike RBD (N501Y,K417N,E484K), His Tag ELISA**  
0.05µg SARS-COV-2 Spike RBD (N501Y,K417N,E484K), His Tag Per Well



Immobilized SARS-COV-2 Spike RBD (N501Y, K417N, E484K), His Tag at 0.5µg/ml (100ul/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 23.3ng/ml determined by ELISA.